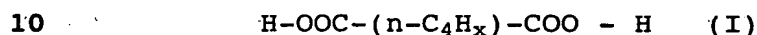


Process for the preparation of a dicarboxylic acid starting from acrylic acid

5 Abstract

A process for the preparation of a dicarboxylic acid of the formula (I)



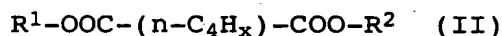
where

x is 6 or 8,

15 starting from acrylic acid,

which comprises

20 a) reacting a dicarboxylic acid diester of the formula (II)



where

25 x is 6 or 8, and

R¹ and R², independently of one another, are C₁-, C₂-, C₃- or C₄-alkyl, aryl or heteroaryl and may be identical to or
30 different from one another,

with acrylic acid to give a dicarboxylic acid of the formula (I) and a mixture of acrylic acid esters of the formulae C₂H₃-COOR¹ and C₂H₃-COOR², where R¹ and R² are as defined
35 above,

b) separating the dicarboxylic acid of the formula (I) obtained in step a) from the reaction mixture obtained in step a),

40 c) dimerizing the C₂H₃-COOR¹, C₂H₃-COOR² or mixture thereof obtained in step a) to give an n-butenedicarboxylic acid diester, and

d) cleaving the dicarboxylic acid diester obtained in step c)
45 into the corresponding dicarboxylic acid of the formula (I).